## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS:**

Claim 1 (Canceled).

Claim 2 (Previously Presented): The method of claim 24 wherein the electrokinetic chromatography is capillary electrophoresis.

Claim 3 (Previously Presented): The method of claim 24 wherein the sample comprises a chemical compound library.

Claim 4 (Previously Presented): The method of claim 3 wherein the chemical compound library is a combinatorial library.

Claims 5-11 (Canceled).

Claim 11 (Previously Presented): The method of claim 24 wherein the probe is selected from the group consisting of protein and nucleic acid.

Claim 12 (Previously Presented): The method of claim 25 wherein the probe has a molecular weight of less than about 10,000 daltons.

Claims 13-15 (Canceled).

Claim 16 (Previously Presented): The method of claim 24 wherein the fluorophore is fluorescein.

Claims 17-23 (Canceled).

Claim 24 (Currently Amended): A method for determining the binding affinity and/or stoichiometry of a binding complex having a binding factor and a probe, comprising:

- (a) contacting a sample comprising a binding factor with a probe comprising a fluorophore, wherein the probe specifically binds to the binding factor forming a binding complex;
- (b) separating the binding complex from and unbound probe into different fractions by electrokinetic chromatography-and-measuring the fluorescence intensity of laser-induced fluorescence of the sample as a function of the relative electrophoretic mobility of the binding complex and unbound probe; and
- (c) subjecting each fraction from step (b) to fluorescence polarization

  measurement under conditions wherein the binding complex produces
  a fluorescence pattern different from that of the unbound probe,
  thereby allowing detection of the binding complex, (i) determining the
  laser-induced fluorescence polarization of the separated binding

complex; (ii) comparing the laser-induced fluorescence polarization of the binding complex with the laser-induced fluorescence polarization of the unbound probe; and (iii) comparing the result obtained in step (i) with the result obtained in step (ii), to detect the binding complex; and (d)—correlating the result obtained in (b) with the result obtained in (c) to determine binding affinity and/or stoichiometry between the probe and the binding factor

wherein the probe is selected from the group consisting of vancomycin, staphylococcal enterotoxin A, and *trp* operator; and wherein the binding factor is selected from the group consisting of vancomycin antibody, *trp* operator-repressor, and staphylococcal enterotoxin A antibody.

Claim 25 (Previously Presented): The method of claim 24 wherein the probe has a molecular weight of less than about 20,000 daltons.

Claim 26 (Previously Presented): The method of claim 12 wherein the probe has a molecular weight of less than about 5,000 daltons.